

ABSTRAC

NATARINA SUKANINGSIH. H4A 002 014. Quality of The Timor Deer Frozen Semen Use Tris Diluter with Various Carbohydrate (Advisor : **YON SOEPRI ONDHO and DJAROT HARSOJO REKSOWARDOJO**)

Purpose of the research is to gain the appropriate diluter type of deer semen and to know the optimum equilibration period before freezing. The reaserch conduct in Timor Deer Breeding Enterprise in Gindosari Village Gebog Distric Kudus Municipility start in, January 22nd 2007 until February 28th 2007 which include material preparation, research conduct and data analysis

The used material is semen which is resulted from accommodation of 5 mature male deer of 2,5 years which have a hard antler. The used experiment planning is complete Random Design factorial Pattern 2 x 3, the first factor isequilibration period distinction, it is 3 hours (E₁) and 5 hours (E₂), whereas the second factor is semen diluter material type, it is tris + sucrose (TS), tris + Fructose (TF) and tris + glucose (TG), therefore it gets 6 treatment combinations in conducting and viability of spermatozoa in fresh semen, after being diluted, equilibration and after thawing.

Result of the research shows that diluter material which is used does not impact to spermatozoa quality (motility and viability). It does not occur interaction between the period of equilibration with diluter material. The old distinction of equilibration influence to spermatozoa viability which is diluted with TG (73,52%) completely different with TF (66,29%). The quality of spermatozoa viability (TF<TS<TG it is 69.18%<75.97% <83.13%)

conclusion of the research is that the highest of motility and viability of spermatozoa is resulted from semen which is diluted by glucose tris with equilibration period in temperature 3 – 5°C for 3 hours.

Keyword : diluter, semen quality, equilibration, Timor deer